Secondary Aluminum MACT

Requirements for Sweat Furnace Operations

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Background Information

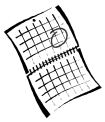
- The Clean Air Act Amendments of 1990 require that EPA develop emission standards for sources that emit Hazardous Air Pollutants (HAPs).
  - Maximum Achievable Control Technology (MACT)
- HAPs - known or suspected to cause cancer or other serious health effects.
  - Sweat furnaces emit dioxins/furans that are HAPs.
- Secondary Aluminum Production MACT standard was issued on March 23, 2000

Who is regulated by this MACT?

- **All** secondary aluminum production facilities are subject.
  - Area sources (Emit <10 tons/year of a HAP or 25 tons/year of a combination of HAPs)
    - Subject to the dioxin/furan emission limits and associated requirements.
    - Affected equipment includes each new and existing thermal chip dryer, scrap dryer/delacquering kiln/decoating kiln, sweat furnace, and secondary aluminum processing unit containing one or more group 1 furnace emission units other than for clean charge.
  - Major sources subject to all requirements

When must I comply with these standards?

- Existing Sources (began construction or reconstruction prior to 2/11/99)
  - No later than March 24, 2003
- New sources (constructed after 2/11/99)
  - March 23, 2000 or startup



How do I comply?

- Comply with the dioxin/furan emission limit and demonstrate by conducting a performance test

OR

- Operate and maintain an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600 ºF or greater.

If you choose to conduct a performance test:

- Conduct prior to the compliance date
- EPA Reference Test Method 23
- Do not have to test if operating an afterburner.

If you comply by operating an afterburner:

- Install afterburner, operate, and maintain per standard
- Operate a device that continuously monitors and records the afterburner temperature.
  - Installed at the exit of the afterburner's combustion zone.
  - Must record the temperature in 15 minute block averages and determine and record the average temperature for each three-hour period.
- Inspect each afterburner once a year and record results.

Additional Requirements

- Operation, Maintenance, and Monitoring (OM&M) plan
  - Submit for approval 6 months before the compliance date.
  - How you will operate the equipment and maintain compliance.

Additional Requirements

- Startup, Shutdown, and Malfunction (SSM) plan
  - Implement by compliance date
  - Describes procedures for operating during startups, shutdown, and malfunctions
  - Record all SSM events and actions taken
- Maintain files for at least 5 years.
- Submit all required reports.

Reports

- Initial Notification
  - July 21, 2000 for existing
  - 120 days after startup for new
- Notification of Performance Test
  - 30 days prior to test
- Notification of Compliance Status
  - 60 days after compliance date

Reports

- SSM Reports
  - Semiannually, if followed SSM procedures
  - If didn't follow SSM plan, call within 2 days & written report within 7 days
- Excess Emission/Summary Reports
  - Semiannually
- Compliance Certification
  - Annually

Permits

- Obtain operating permit
  - Application submitted by December 9, 2004
  - Check with OAQC or LLCHD
- May need construction permit
  - Check with NDEQ, OAQC, or LLCHD

Assistance

- Institute of Scrap Recycling Industries (ISRI)
  - Tom Tyler (202) 662-8516
  - ISRI Website **www.isri.org**
  - Have many resources available
- Aluminum Association
  - Chuck Johnson (202) 662-8516
  - Website **www.aluminum.org**

Assistance

- NDEQ Guidance Document
  - DEQ Website **www.deq.state.ne.us**
- Melissa Woolf, NDEQ Air Quality
  - (402) 471-6624
- Tom Franklin, Assitance Division
  - (402) 471-8697
- EPA Region VII
  - (913) 551-7566
  - EPA Website **www.epa.gov**